

The Commonwealth of Massachusetts

ANNUAL REPORT

OF THE

DIRECTOR OF ANIMAL INDUSTRY

FOR THE

YEAR ENDING NOVEMBER 30, 1926

DEPARTMENT OF CONSERVATION



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The Commonwealth of Massachusetts

DEPARTMENT OF CONSERVATION

DIVISION OF ANIMAL INDUSTRY,
BOSTON, NOVEMBER 30, 1926.

To the Commissioner of Conservation:

The following report of the work of this Division for the year ending November 30, 1926, is herewith submitted:

On October 5, 1926, Dr. Lester H. Howard, of Boston, resigned as Director after having served in that capacity since January 2, 1915. On November 6, 1926, Frank B. Cummings of Newton was appointed by the Governor and Council to succeed Dr. Howard.

The work of this Division has to do with the health of domestic animals particularly in regard to the prevention, suppression and extirpation of the several contagious diseases to which this class of animals is subject.

The activities of the Division are governed by statute either through laws passed by the General Court or by orders made by the director (Sec. 2, Chap. 129, General Laws) and approved by the Governor and Council, these orders having the force of law.

The working force of the Division is composed of:

(1) A Director — appointed by the Governor with the advice and consent of the Council for a term of three years. The Director has general charge of the Division and has authority to make and enforce reasonable orders, rules and regulations relative to the control of contagious diseases of domestic animals.

(2) Agents — in this Division there are two classes. (a) Men employed on a salary basis, i. e., devoting their full time to work of the Division. Of these agents two are classed as Chief Veterinary Inspectors, one assigned to headquarters at Boston, the other in charge of Quarantine Station at Brighton; seven as District Veterinarians having more or less direct charge of a given section of the State; four as Veterinary Inspectors with headquarters at Boston, and two as Assistant Veterinary Inspectors, laymen, one assigned to the quarantine station at Brighton, the other acting as assistant in field work. (b) Men employed on a per diem basis but under civil service regulations. These agents are mostly veterinarians engaged in private practice to whom special assignments are given when such service is required.

(3) Inspectors of Animals. Every town and city in Massachusetts is in accordance with law required to appoint annually in March one or more persons to act as inspector of animals for their respective city or town. The duty of an inspector of animals is to comply with and enforce all orders and regulations directed to them by the Director of the Division of Animal Industry and to investigate reports of suspected contagious diseases in animals.

The diseases most often demanding the attention of the Division are in the order of their frequency and importance, — tuberculosis in cattle, cholera and allied diseases in swine, rabies in dogs and other animals, glanders in horses, anthrax, black-leg and hemorrhagic septicemia in cattle, miscellaneous diseases such as mange in cattle and horses, parasitic diseases in sheep, foot-and-mouth disease in cattle, etc.

Following is a gross summary of the Division's work for the year ending November 30, 1926:

GENERAL SUMMARY

CATTLE

- 6,129 Massachusetts cattle physically examined by agents and inspectors.
- 160 Massachusetts cattle tuberculin tested at Brighton Stockyards.
- 37,675 Tuberculin tests made under provisions of Chapter 353, Acts of 1922.
- 1,753 Interstate cattle tested.
- 15,042 Interstate and State cattle examined at stockyards, Brighton, and their test records viséed.
- 9,101 Interstate cattle identified by inspectors at other points.
- 647 Animals on 72 farms in 30 towns given preventive treatment against blackleg.
- 15 Animals given preventive treatment against anthrax.
- 132 Preventive treatments given against hemorrhagic septicemia.
- 156 Visits to unsanitary premises were made by district veterinarians.
- 8 Reported cases of actinomycosis were investigated.

HORSES

- 27 Horses examined for glanders.
- 1,575 Horses received on permits and released.

DOGS

- 1,714 Cases of possible rabies in animals were investigated.

SWINE

- 96,393 Treatments given in prevention or cure of hog cholera.
- 32,833 Treatments given in prevention or cure of hemorrhagic septicemia.
- 2,173 Treatments given in prevention or cure of necro-bacillosis.

BOVINE TUBERCULOSIS

The work in connection with the eradication of tuberculosis in cattle continues as the most important activity of the Division. For convenience the record of this work is divided into three classes:

- (1) The examination of cattle reported as showing physical symptoms of disease.
- (2) The tuberculin testing of cattle.
- (3) Supervision of the interstate movement of cattle into Massachusetts.

1. *The examination of cattle reported as showing physical symptoms of disease.* Any person who has reason to suspect the existence of any contagious disease in a domestic animal is required under the law (Sec. 28, Chap. 129) to report same. If upon examination the animal is found to be affected with tuberculosis, it may by order of the Director be condemned and killed (Sec. 11, Chap. 129) and an amount not exceeding \$25 (Sec. 12-A., Chap. 129) paid the owner if the animal had been owned by him for a period of not less than 60 days, and had been kept within the Commonwealth for six consecutive months both periods being next prior to date of killing. Under this section 558 head of cattle were reported to the Division of which 417 were killed and lesions of tuberculosis found; 8 were killed and no lesions found; 3 were slaughtered by owner and lesions found; 7 were slaughtered by owner and no lesions found; 25 died prior to examination by a Division agent and 98 were released, physical examination not indicating tuberculosis. In connection with this section of the work it is required that the agent inspecting the animal also make a careful physical examination of all other cattle in the building where the suspect is housed. If the animal is condemned disinfection of the premises occupied by said animal is ordered. The local inspector of animals is then required to report when disinfection has been properly done, and at the expiration of three months is required to make a careful physical examination of all cattle then on the premises.

2. *The tuberculin testing of cattle.* The use of tuberculin as a diagnostic agent is (Sec. 32, Chap. 129, Gen. Laws) restricted to cattle brought into the Commonwealth — cattle in quarantine stations at Brighton and Somerville — cattle reported by a competent veterinary surgeon as tuberculous upon physical examination and to cattle the owner of which makes a written request for test. That the trend of cattle owners is to free their herds of tuberculosis by the use of tuberculin in the testing of cattle is evidenced by the increased demand each year for this class of work. While the law (Chap. 353, Acts of 1922) commonly referred to as the "Request Test Law" is in no way compulsory, a written request being required before the test can be applied, — the increasing number of local boards of health making regulations requiring that unpasteurized milk intended for sale be from tuberculin tested cows is gradually forcing into testing many dairy owners that otherwise would not apply.

This year a decrease is shown in the number of herds presented for first test — 490 as compared with 882 in 1925, and in the total number of tests made, 1878 against 2093 in 1925. This decrease was due to two conditions, namely, — the lack of a sufficient Federal allotment to insure payment by the Federal government of claims of owners for reacting cattle and the temporary discontinuance of all testing by the Division pending investigation of the so-called cattle frauds. Through the cooperation of the State with the United States Government in the testing of cattle, Massachusetts owners of reacting cattle are, if certain specific rules and regulations are complied with, allowed compensation by the Federal government to an amount usually equal to that paid by the Commonwealth of Massachusetts. The Federal allotment to Massachusetts for this purpose does not equal the amount appropriated by the State itself and is rarely sufficient to meet all claims for payment. The appropriation for the Federal fiscal year beginning July 1, 1925, became exhausted in November 1925, and as a new appropriation was not available until July 1, 1926, no test or retest during that period was conducted by this Division except on receipt of a so-called "waiver", i. e., a form signed by the owner of the cattle to be tested agreeing to accept State payment only, to be supplemented by Federal payment provided an additional Federal allotment was received for that purpose. This had a natural tendency to retard the work as shown by the decreased number of requests for new tests received, and by the postponement of the making of many retests during the period between November 15, 1925, and July 1, 1926, seven months of our fiscal year. On August 17th all testing by the Division was discontinued pending an investigation of reported irregularities in connection with tuberculin testing in Hampden County and which investigation has since extended to all the counties in the Commonwealth. On October 11th testing was resumed but limited to herds previously tested, that is to retest work. The making of new or first tests was not authorized until late in November, too late to be included in this year's record.

Following is the year's record of tests:

1,878 herds tested; 37,675 cattle tested (13,807 purebred, 23,868 grade).

6,337 cattle reacted (987 purebred, 5,350 grade).

First test, 490 herds, 6,814 head, 3,638 reacted.

Second test, 468 herds, 5,693 head, 795 reacted.

Third test, 636 herds, 17,862 head, 1,779 reacted.

Accredited herds, 284 herds, 7,306 head, 125 reacted.

The percentage of reactors found to all tests equals 16.8%.

1st test—53.4%. 2nd test—13.9%. 3rd test—9.9%. Accredited Herds 1.8%.

Tests were made in 1,615 different herds containing 30,298 head of cattle, 5,582 or 18.4% reacting. A second test was made in 251 of these herds containing 6,756 head, 654 reacting, and a third test in 12 of these herds containing 621 head, 101 reacting.

On November 30, 1926, there were listed 1,875 herds containing 28,495 head under supervision as compared with last year's figures of 1,716 herds, 26,646 head. The above figures indicate 7% of the herds and 14.7% of the cattle population of the State as being under test.

444 herds containing 9,736 head of cattle have received Accredited herd certificates from the United States Bureau of Animal Industry having passed two annual tests without a reactor.

561 additional herds containing 6,314 head of cattle have passed one clean test.

293 herds containing 1,445 cattle, two clean tests.

This makes a total of 1,298 herds in which no reacting cattle were found at last test and which herds contained 17,495 head of cattle.

These figures show an increase over last year's record which was as follows: 376 herds, 8,105 head — accredited; 527 herds, 5,777 head — one clean test; 187 herds, 1,002 head — two clean tests. Total — 1,090 herds, 14,884 head of cattle.

The following tabulation is a record of the "Request Test" work by counties for the year:

	TOTAL TESTS			UNDER TEST		ACCREDITED	
	Herds	Head	Reacted	Herds	Head	Herds	Head
BARNSTABLE.....	242	1,357	68	220	1,041	44	445
BERKSHIRE.....	207	4,609	336	259	4,750	72	1,740
BRISTOL.....	56	1,734	149	47	1,346	21	827
DUKES.....	10	104	15	35	269	16	121
ESSEX.....	54	2,355	112	48	1,658	21	405
FRANKLIN.....	67	2,059	121	66	1,635	40	1,155
HAMPDEN.....	100	2,504	977	100	1,467	42	783
HAMPSHIRE.....	77	2,879	645	74	1,775	24	582
MIDDLESEX.....	273	5,360	1,201	225	3,151	26	555
NANTUCKET.....	9	162	2	24
NORFOLK.....	198	3,746	606	214	2,876	34	488
PLYMOUTH.....	291	3,308	461	278	2,648	32	542
SUFFOLK.....	9	101	17	15	113	3	6
WORCESTER.....	294	7,559	1,629	285	5,604	67	2,063
TOTAL.....	1,878	37,675	6,337	1,875	28,495	444	9,736

These 1,878 herd tests were conducted by:

Division Agents.....	1,178 herds	28,160 head	5,345 reacted
Per diem agents.....	91 "	1,689 "	63 "
Federal agents.....	452 "	5,523 "	656 "
Private veterinarians under authorization:	157 "	2,303 "	273 "

For purpose of identification it is required that any bovine animal which reacts to a tuberculin test be tagged by insertion into the left ear of a metal tag, this tag furnished by this department is marked MASS. REACTOR and bears a serial number. For some time it has been felt that the ease with which this tag may be removed opens the way for unscrupulous persons to defeat the purpose of the requirement by either changing the tag from one animal to another, usually of inferior quality, or removing it altogether. In an endeavor to prevent action of this kind legislation was asked for at this year's session of the Legislature which if passed would have allowed the branding of reacting cattle. This recommendation of the Commissioner was referred to the next General Court. Rumor that changing of tags was actually taking place resulted in the issuing of an order by the Commissioner to brand all reacting cattle, which order late in September was approved by the Governor and Council. This order should prevent reacting cattle from being disposed of for any purpose other than immediate slaughter and should stop to some extent the alleged practice of changing of ear tags.

Too much stress can not be given to the fact that the detection of tuberculosis through employment of the tuberculin test is only one factor in the cleaning up of an infected herd, district or area. Removal of reacting cattle *without* proper disinfection of premises, careful selection of new purchases, and constant vigilance of the cattle owner against reinfection will never result in eradication of this disease. Floors, walls, ceilings, mangers, drinking fountains and yards should be given a thorough cleansing and disinfection; manure should be removed and exposed through spreading to the rays of the sun. No additions to a herd should be made without knowledge of the history of the herd from which animal is derived and then only on approved record of test. Vigilance should be observed against possible contact with visitors from badly infected premises or through direct contact across line fences, etc.

The question of replacements for cattle which react and are slaughtered is one that gravely concerns all herd owners. The slaughter of 23,569 reacting cattle in the last four years has resulted in a serious shortage in the available supply to be found in the three States to which Massachusetts naturally turns for its replacements, namely, —Vermont, Maine and New Hampshire. In an attempt to relieve this shortage buyers have in the past year made shipments from points as far away as Pennsylvania, Wisconsin, Nebraska and Canada.

Conditions surrounding shipments through the Brighton Stockyards to which market many buyers are obliged to go for purchase of cattle have not been entirely satisfactory, but changes are now under consideration whereby it is hoped to provide a safe market for the purchase of cattle shipped thereto from herds being maintained under State and Federal supervision.

During the year there were 3,971 Massachusetts cattle intended for dairy purposes consigned to the quarantine station at Brighton; 3,811 were accompanied by satisfactory certificates of test; 160 were untested. Department regulations require that all cattle leaving the quarantine station for dairy purposes must have passed a satisfactory tuberculin test, accordingly, all untested cattle are tested upon arrival. As a result of such test to the 160 head of cattle referred to above, 38 or 24% reacted.

3. *Supervision of the interstate movement of cattle into Massachusetts.* Massachusetts regulations (Department Order No. 35) require that all cattle shipped into this state, with the exception of cattle consigned to a slaughtering establishment maintained under Federal inspection and cattle consigned to the quarantine stations at Brighton and Somerville, must be accompanied by a permit for shipment issued by the Director of the Division of Animal Industry. Massachusetts law (Chap. 495, Acts of 1924) requires that cattle intended for dairy purposes shall be inspected and passed as healthy prior to shipment to this State. On arrival cattle must remain under quarantine until identified and released, identification being made from the health certificate or record of test forwarded by the livestock official of the state in which shipment originated. For the convenience of cattle buyers and shippers this Division maintains an office at the public stock yards at Brighton for purpose of identifying and releasing cattle shipped thereto for sale purposes, for issuing of health certificates if called for, checking of State reactors and for applying the tuberculin test to such cattle as are brought in untested. During the year 12,809 dairy cattle originating from the following States were received and checked at these yards: Maine 5,970; New Hampshire 3,781; Vermont 2,691; Connecticut 22; New York 215; Minnesota 90; Ohio 20; Canada 20. Eleven thousand two hundred and thirty-one were released on approved records of test; 1,578 held and tested. Of the 1,578 head held and tested, 124 reacted.

At other points in the State there were received on permits issued from this office 11,577 head of cattle from the following states: California 26; Canada 242; Colorado 12; Connecticut 563; Indiana 93; Iowa 3; Kansas 1; Maine 1,267; Maryland 13; Michigan 71; Minnesota 216; Missouri 15; New Hampshire 2,219; New Jersey 765; New York 1,105; North Carolina 1; Ohio 84; Oklahoma 17; Pennsylvania 92; Rhode Island 692; Texas 1; Vermont 3,404; Virginia 35; Washington 17; West Virginia 53; Wisconsin 570. Of these 11,577 cattle, 2,301 were for immediate slaughter; 1,166 for exhibition purposes and 8,110 for dairy purposes. Of the 8,110, 7,935 were accepted on tests made before shipment and 175 were tested after arrival.

That cattle untested and unaccompanied by a permit are brought into the state in violation of both State and Federal laws is frequently drawn to the attention of this Division. Efforts are constantly made to prevent this illegal traffic and persons apprehended are promptly prosecuted. Cooperation by border states in prevention of this violation of regulations is being sought at this time.

CONTAGIOUS DISEASES OF SWINE

The general policy regarding the prevention and cure of swine diseases adopted by this Division has been followed during the past year. The increased demand for this work indicates that the swine owners appreciate the value of the service and realize the necessity of protecting swine against the ravages of disease if the raising

of this class of animals is to be at all profitable. The larger part of the work in connection with the immunizing of swine against cholera is done by agents of this division, the services of these agents are furnished without cost to the swine owner — the owner has, however, to pay for the serum or virus used, payment being made direct to the biologic house supplying the material. Experience has shown that swine fed on garbage are particularly subject to outbreaks of hog cholera unless the individual members of the herd have been previously immunized against the disease by use of the so-called simultaneous treatment, i. e. — the injection of anti-hog cholera serum and hog cholera virus. If treatment is given early danger from this source is practically eliminated, the treatment assuring life immunity.

An outbreak of cholera covering a wide expanse of territory occurred during the Summer and Fall in the Western States, and was to some extent felt here in the East. An alarming shortage of serum and virus necessitated modification of government requirements surrounding the manufacture of these products in order to facilitate its production. Fortunately the biologic houses holding permits to ship this class of material to Massachusetts had a sufficient supply furnished to this Division to provide for all our needs. In accordance with our requirements, all serum and virus shipped to this state is tested as to its potency at a test house maintained at Tewksbury, thus insuring material up to the required standard. During the year 96,393 treatments in prevention or cure of cholera were administered, an increase of 11,417 over those applied in 1925. These 96,393 treatments were given on 805 different premises in 182 cities and towns and required the making of 2,163 visits by one or more field men. Private veterinarians holding permits as required by department Order No. 12 applied 108 treatments during the year. The graph at end of this report gives a record of treatments applied since this class of work was begun.

Hemorrhagic Septicemia: Co-existent with or often following cholera, hemorrhagic septicemia is found to occur. In many instances fatal, death occurring in a comparatively few hours, it necessitates early and prompt attention. Preventive treatment by use of aggressin and curative treatment by use of bacterin or serum is resorted to and meets with marked success if employed before the disease has gained too strong a foothold. During the past year 32,833 treatments have been applied.

Necro-bacillosis: While not so prevalent as hemorrhagic septicemia, necro-bacillosis is called to our attention occasionally. One outbreak was reported this year; 2,173 treatments being given.

RABIES

An increase in the number of positive cases of rabies this past year of 75 cases over the report of 1925 is recorded. There is probably no contagious disease of animals which is regarded by the general public with more fear than is rabies. Once its symptoms in man or animal are manifest there is little if any possibility of preventing a fatal termination. Notwithstanding this fact there is a general disregard of laws relating to dogs, the usual carrier of the infection. If the proper County, City or Town officials would compel enforcement of the law which requires all dogs to be licensed, which law makes it obligatory for licensed dogs to wear a collar bearing name and address of owner, and would see that all dogs not so equipped were humanely destroyed, this procedure by removing the unlicensed and stray dogs would greatly aid in preventing spread of rabies. Many cases are brought to our attention which we are unable to trace to their source on account of lack of collar or distinguishing mark.

The quarantine methods employed in the past few years having proven most effective, are still followed. Animals known to have been in contact with a rabid animal are ordered restrained for a period of 90 days from date of said contact. Animals known to have bitten persons are restrained for 14 days from date injury was inflicted. In towns or cities where rabies has occurred the local officials have the power to enforce a general or town quarantine. The immunizing of dogs against rabies, although proving to be effective in some states, has not been very generally adopted. The Division's records relating to rabies are divided into three classes:

1. Animals exhibiting symptoms resembling rabies.
2. Animals known to have been in contact with a case of rabies.
3. Animals which have been reported as having inflicted injuries by biting or scratching.

During the year 1,714 animals were reported for diagnosis, quarantine or observation and with the 84 cases brought forward for disposal from previous year made a total of 1,798 animals. These cases are recorded as follows:

Class 1. Reported as rabies: 293 dogs and 1 cat proved to be rabid on either physical examination, laboratory examination or both; 53 dogs, 2 cats and 1 cow were proved not to have rabies and 5 dogs were considered as suspicious, i. e., symptoms not definite enough to justify a positive diagnosis.

Class 2. Animals in contact with a case of rabies; 268 dogs, 2 cats and 2 pigs were released after a 90 day period of quarantine as no symptoms of rabies had developed. Thirty-six dogs, 5 cats and 1 pig were killed by owners or died without symptoms of rabies. Twenty-four dogs and 6 pigs developed definite symptoms of rabies. Five dogs and 1 cat died examination indicating death due to a condition other than rabies. Thirty-nine dogs were under quarantine at the close of the fiscal year.

Class 3. Animals inflicting injury by biting or scratching: 912 dogs and 3 cats were released after a 14 day period of quarantine, no symptoms of rabies developing. Sixteen dogs were killed by owners and no examination made; 88 dogs and 5 cats were killed, laboratory examination not indicating rabies; 29 dogs and 1 cat were under observation at close of fiscal year.

From this record it is shown that 317 dogs, 6 pigs and 1 cat were diagnosed as rabies. One thousand two hundred fifty-one persons were reported as being bitten or scratched by dogs, 14 by cats and 2 by horses. Of the 324 animals recorded as positive cases of rabies 93 dogs were reported as having bitten 180 persons and 1 cat as having bitten 5 persons. Of the 1,714 animals reported 100 dogs and 1 cat are recorded as "owners unknown"; 26 dogs and the 1 cat proving to be rabid.

Laboratory examination of the brains of 342 animals indicated 203 to have been affected with rabies.

GLANDERS

Glanders, a disease of horses, for years prevalent in this State has apparently been eradicated as far as Massachusetts is concerned as not a positive case has been found this year. Considered on account of its transmissibility to man, generally with fatal results, and on account of its economic significance to horse owners, as one of the most important animal diseases with which this Division has had to contend, it now occupies a minor place in the activities of the Division. Regardless of the fact that not a case of glanders was found this year it is unreasonable to expect that an occasional case may not arise, as from the nature of the disease it is known the infection may remain latent for years before developing active symptoms.

Reports of horses showing symptoms of the disease are given immediate attention and in addition to physical examination in most cases the animals are subjected to the ophthalmic test or blood is taken for laboratory examination and in some instances both tests are made. During the year 27 horses were reported as suspects. Twenty-five samples of blood were taken from 23 of the 27 and ophthalmic tests applied to 14 with negative results.

Order No. 36 requiring permits for horses intended for shipment to this state from New York, New Jersey, Rhode Island and Connecticut still remains in force. This order has served its purpose well, but need for its enforcement is past and revocation of the order is now under consideration. One thousand five hundred and seventy-five horses arrived in the State during the year on permits, 6 of which were held for test but later released.

MISCELLANEOUS DISEASES

Anthrax: Not a case of anthrax has been reported during the year. As the causative agent of this disease, a spore bearing bacillus, is very resistant to destruction, remaining in the soil for years, an occasional outbreak is apt to occur in previously infected areas. Care should accordingly be taken to avoid the use of portions of buildings or pastures where the disease has previously been found unless anthrax preventive treatment has been given animals placed on those premises. Fifteen head of cattle were given preventive treatment by division veterinarians this year.

Blackleg: The causative agent of this disease like that of anthrax is found to infect premises particularly pastures for years. Such pastures should accordingly be avoided unless preventive blackleg treatment is given to animals to be pastured there. It is a disease peculiar to young cattle, usually occurring in cattle under two and a half to three years of age generally during the pasture season; its sudden development with early and high mortality rate often leads cattle owners to suspect the dead animals to have been killed by lightning. Preventive treatment if given before infection occurs is nearly 100% effective — the acquired immunity lasting for about a year. Treatment is usually given just prior to turning cattle to pasture, thereby insuring them against this disease. This year treatment by division agents was given to 647 animals on 72 farms in 30 towns.

Actinomycosis: A disease generally of cattle and usually affecting the bones of the jaw is called to our attention each year in different sections of the state. If found in early stages it is amenable to treatment recoveries often occurring. If treatment is not desired, the affected animal is condemned for slaughter. Eight cases in 7 towns were reported this past year.

Mange: Mange, a parasitic disease of animals — at times prevalent in horses and cattle and requiring prompt quarantine measures — has been reported on only three premises this year, 5 head of cattle being affected, all of which responded to treatment and were released.

Infectious or Contagious Abortion: This disease now recognized as a specific infection is without doubt the most widely disseminated of all contagious animal diseases, being found more or less prevalent in every section of the country. Authorities vary regarding not only the method to employ in its treatment but also as to the advisability of quarantine or condemnation of affected animals. No action has as yet been taken by this division to regulate the movement or reporting of cattle affected with this disease. Laboratory service is, however, offered to veterinarians or livestock owners for purpose of examination of blood or specimens for detection of bacillus abortus, now generally conceded to be the causative agent. There were received this year 116 samples of blood for examination taken from cattle on 19 premises. Of this number 39 were diagnosed as positive.

Tuberculosis in Swine: This disease in swine is not found to any extent in Massachusetts, but is reported occasionally, usually found at time of slaughter. Although generally found in garbage fed swine, investigation has at times led to discovery of tubercular cattle on the premises on which the affected swine originated. Disinfection of the premises and a physical examination of cattle thereon are required when the disease is reported. During the year 3 cases were reported.

LABORATORY SERVICE

During the year the bacteriological laboratory of the State Department of Public Health has rendered valuable service in the examination of specimens submitted for diagnoses. Its service is of especial value in connection with the examination of brains of animals for diagnoses for rabies; examination of samples of blood for glanders in horses and for infectious abortion in cattle. During the year the brains of 331 dogs, 8 cats, 1 cow and 2 horses were examined for rabies, 25 samples of blood for glanders and 116 samples of blood for infectious abortion. In addition to the above the following specimens were examined: Anthrax, 5; Blackleg, 1; Hemorrhagic Septicemia, 8; Tuberculosis, 10; Miscellaneous, 5.

ANNUAL INSPECTION OF FARM ANIMALS AND PREMISES

Under the provisions of Section 19, Chapter 129 of the General Laws, an order was issued by the Director on January 12, 1926, to every inspector of animals in the cities and towns of the Commonwealth calling for an inspection of all cattle, sheep and swine and of the premises where kept.

This order called for the completion of the inspection by March 1, and for a report of the same to be promptly forwarded to the Division's office. The inspectors' reports came forward in most instances in good season and were duly examined and tabulated in minute detail.

These reports constitute a "census" of the cattle, sheep and swine on 26,666 farms or premises in the State where these species of animals are kept. From these reports the following facts are gathered:—

The number of cattle of all kinds has decreased from the 1925 record of 204,163 to 192,777 — a decrease of 11,386 head.

The number of swine reported by local inspectors of animals in the Spring months of this year was 70,062.

The number of sheep reported was 10,693.

No meetings of Inspectors of Animals were held this year as it was decided to postpone these meetings until the latter part of March, 1927.

RECOMMENDATIONS FOR LEGISLATION

1. *Tuberculin Testing of Cattle.* — Under the present law there is nothing to prevent a person acquiring cattle immediately prior to an application for a tuberculin test regardless of whether said person is the owner or not, or presenting cattle for test on premises other than those of said owner and thereby defeating the law, the purpose of which is to maintain herds free from tuberculosis.

The proposed amendments require that the person applying for the test shall have owned the cattle on the premises where tested for sixty days or have added them to his herd on proper test. The act also provides that an application for a tuberculin test shall be signed by the owner only. These measures should help to prevent fraud against the Commonwealth.

2. *Reimbursement by the Commonwealth for the Slaughter of Certain Cattle Affected with Tuberculosis.* — During each of the past three years the Federal allotment for reacting cattle became exhausted. This exhaustion of funds apportioned by the Federal government for payment to citizens of Massachusetts for cattle which react to a tuberculin test applied under the State and Federal cooperative agreement, deprives many Massachusetts cattle owners of Federal payment for such cattle regardless of the fact that said owners may have complied with the rules and regulations under which this test is applied. Failure of such payment is a hardship for farmers or cattle owners who are attempting to maintain herds of cattle free from tuberculosis. This act would remedy the possible lack of Federal funds and encourage cattle owners in the continuance of this work by enabling the Commonwealth to pay the share of the Federal Government when their appropriation became exhausted.

FINANCIAL STATEMENT

Appropriation for the salary of the Director, chapter 79, Acts of 1926		\$3,500 00
Expended during the year for the salary of the Director	\$3,206 76	
Unexpended balance	293 24	
		\$3,500 00
Appropriation for personal services of clerks and stenographers, chapter 79, Acts of 1926	\$9,300 00	
Transferred from Appropriation for Extraordinary Expenses	110 00	
Total amount appropriated		\$9,410 00

Expended during the year for personal services of clerks and stenographers		\$9,410 00	
Appropriation for services, other than personal including printing the annual report, traveling expenses of the Director, and office supplies and equipment, chapter 79, Acts of 1926		\$4,300 00	
Expended during the year for the following purposes:			
Books and maps (\$52 less \$2 Refund)	\$50 00		
Express and messenger service	288 80		
Postage	787 51		
Printing report	57 95		
Other printing	592 85		
Telephone and telegrams (\$839.48 less \$26.85 Refunds)	812 63		
Stationery and office supplies	974 32		
Expenses of the Director	74 09		
Total expenditure	\$3,638 15		
Unexpended balance	661 85		
		\$4,300 00	
Appropriation for personal services of veterinarians and agents engaged in the work of extermination of contagious diseases among domestic animals, chapter 79, Acts of 1926	\$44,500 00		
Brought forward from 1925 Appropriation	25 00		
Transferred from Appropriation for Extraordinary Expenses	750 00		
Total amount appropriated		\$45,275 00	
Expended during the year for the following purposes:			
Services of salaried agents	\$35,405 00		
Services of per diem agents	8,237 00		
Labor hired	104 00		
Total expenditure	\$43,746 00		
Unexpended balance	1,529 00		
		\$45,275 00	
Appropriation for the traveling expenses of veterinarians and agents, chapter 79, Acts of 1926	\$22,000 00		
Supplementary Appropriation, chapter 398, Acts of 1926	1,000 00		
Transferred from Appropriation for Extraordinary Expenses	250 00		
Total amount appropriated		\$23,250 00	
Expended during the year for the following purposes:			
Traveling expenses of regular agents	\$18,816 16		
Traveling expenses of per diem agents (\$3,799.80 less \$70 Refund)	3,729 80		
Total expenditure	\$22,545 96		
Unexpended balance	704 04		
		\$23,250 00	
Appropriation for reimbursement of owners of horses killed during the present and previous years, travel, when allowed, of inspectors of animals, incidental expenses of killing and burial, quarantine and emergency services and for laboratory and veterinary supplies and equipment, chapter 79, Acts of 1926		\$5,700 00	

Expended during the year for the following purposes:
1 horse condemned and killed on account of glanders

(1925)	\$50 00	
Supplies for veterinary inspectors	490 20	
Laundry	389 73	
Antiseptics, biologics and disinfectants	238 85	
Thermometers, needles, syringes, etc	475 35	
Ear-tags, punches, chains, etc.	3,214 75	
Expenses of killing and burial	23 00	
Quarantine expenses	341 25	
Sundries	40 25	
	<hr/>	
Total expenditure	\$5,263 38	
Unexpended balance	436 62	
	<hr/>	\$5,700 00

Appropriation for reimbursement of owners of cattle
killed as authorized by chapter 304, Acts of 1924,
and chapter 129, General Laws, as amended by
chapter 353, Acts of 1922, during present and
previous years, chapter 79, Acts of 1926

Brought forward from 1925 Appropriation	\$200,000 00	
	13,083 35	
	<hr/>	
Total amount appropriated		\$213,083 35

Expended during the year for the following:

5,807 head of cattle killed in 1924, 1925 and 1926 (chap- ter 353, Acts of 1922) (\$158,707.96 less \$950 Refund)	\$157,757 96	
415 head of cattle killed (physical cases)	10,727 57	
	<hr/>	
Total expenditure	\$168,485 53	
Unexpended balance	44,597 82	
	<hr/>	\$213,083 35

The average amount paid for condemned tuberculous cattle for the year was \$24.48.

The average amount paid for cattle slaughtered under the provisions of Chapter 353, Acts of 1922, was \$47.46 for registered purebred cattle and \$23.57 for grade cattle.

Sixty claims for reimbursement for cattle condemned and killed as physical cases of tuberculosis during the year remain unsettled, these claims amounting to \$1,470.

Two hundred and eighty-six unpaid claims covering 2,886 cattle, to which provisions of Chapter 353, Acts of 1922, apply, remain unpaid, amounting to \$74,309.94.

There has been received a refund of \$23.22 on account of previous year's expenses.

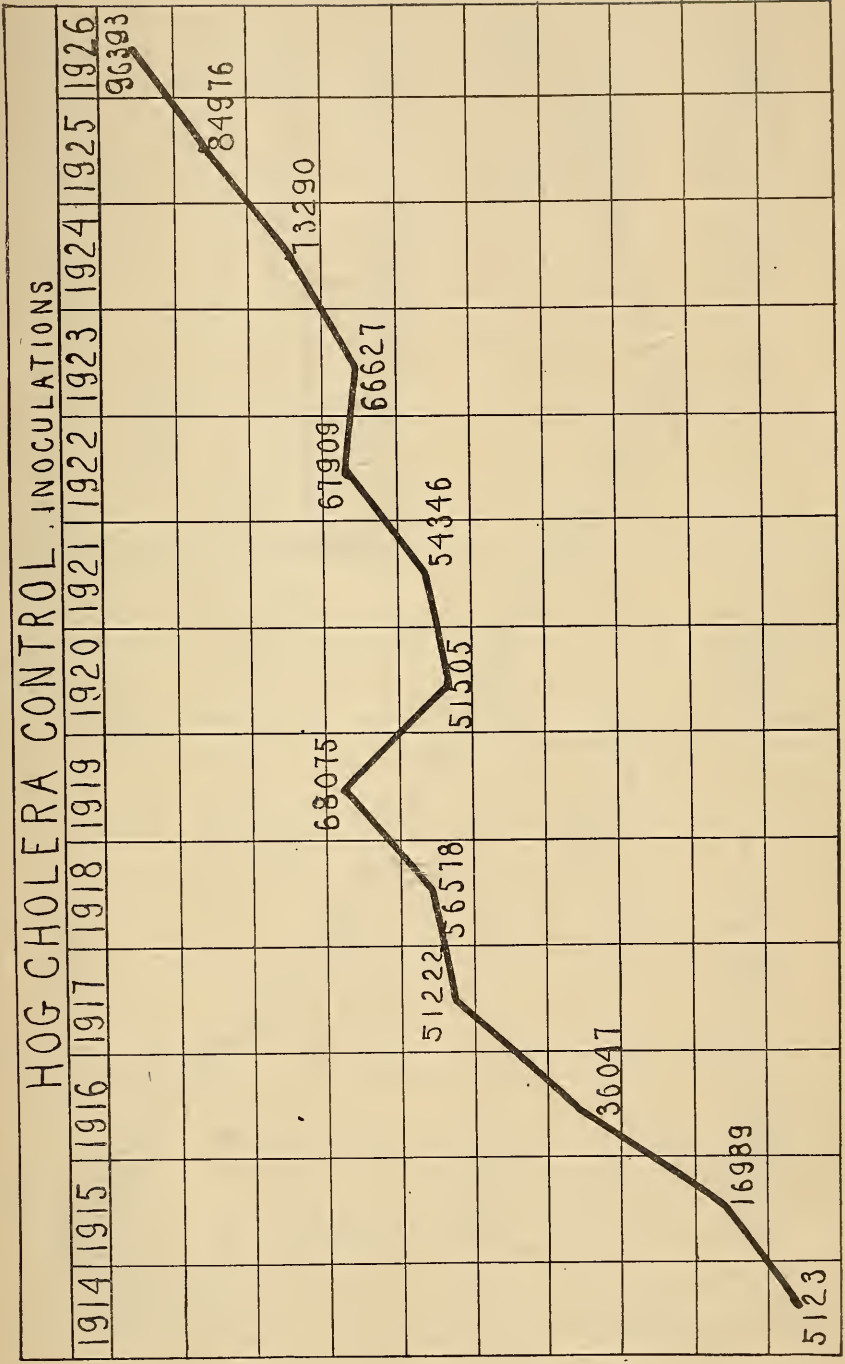
There has been received during the year from the sale of hides and carcasses of condemned animals \$38.47.

Respectfully submitted,

FRANK B. CUMMINGS, *Director*.

APPENDIX

The following graphs show the work of the Division of Animal Industry in control of the principal contagious diseases of animals for a period of years.



RABIES

